

# Management

and

uses

of

## WEEPING LOVEGRASS

In Arizona

Lovegrass, Weeping



Weeping lovegrass, *Eragrostis curvula* (Schrad.) Nees, is an introduced, densely tufted, long-lived, warm-season, perennial bunchgrass. The light green leaves and stems are basal, long, and lax. The characteristic curving of the stems and leaves gives the plant its name. It has a heavy fibrous root system which, with its dense leaves, make it an ideal erosion control plant. Seedling vigor is strong and initial growth is rapid where climate and soil are favorable. It is more cold-tolerant, but less drought-tolerant than Boer lovegrass.

### VARIETIES

'A-67' released cooperatively by the Tucson Plant Materials Center, SCS, and the Arizona Agricultural Experiment Station has been distributed widely and is the strain from which most common weeping lovegrass was derived. 'Ermelo' weeping lovegrass was released by the Texas Research Foundation, Renner, Texas, and announced as leafier, more productive and palatable than common weeping lovegrass. 'Morpa' weeping lovegrass, a newly-released variety by the ARS and the Oklahoma Agricultural Experiment Station, is announced as having improved palatability.

### ADAPTATION

Climate - Weeping lovegrass is suited to sites in Major Land Resource Areas 35, 39 and 41 at elevations of 4500 to 6500 feet with more than 16 inches average annual precipitation. It will grow well at lower elevations on sites that received additional moisture from surrounding areas or with irrigation. Without irrigation, it benefits most from predominantly summer rainfall. It has survived temperatures of -15°F. However, severe winter injury occurs below 0°F if the plant is mowed or grazed too closely in late fall.

Soil - This grass grows well on a wide range of soil types from coarse sands to fine clays and with pH ranging from strongly alkaline to strongly acid. However, it will become chlorotic on soils high in sodium. Like Lehmann and Boer lovegrasses, its outstanding soil-adaptation is the ability to establish on infertile and eroded land.

Range Site - In Arizona it is unsatisfactory in range plantings unless seeded as a single species. Seeded alone it is adapted on all range sites within its climatic and soil range.

### USES

Due to its abundant coarse stems and leaves, heavy root system, and rather low palatability, it becomes apparent that weeping lovegrass should be considered a specialty grass for certain conservation purposes in Arizona.

Beautification, Erosion Control, and Recreation - It has been planted with good success on many highway cut and fill slopes and mine spoil banks. It has been reported as providing better cover than any other grass on highly acid mine spoil and tailings areas. It is an attractive screening plant and establishes readily on infertile soils and subsoils. Its dense roots and abundant leaves makes this plant desirable for erosion control and waterway plantings.

Livestock - Weeping lovegrass makes a large volume of nutritious forage relished by horses and grazed readily by cattle in preheading stages when young growth is succulent. It should never be planted in mixtures with other grasses and should always be utilized in straight seedings. It is reported as furnishing large volumes of forage with irrigation, and is especially valuable where irrigation water is limited. In this use it requires careful management.

Wildlife - Large game utilize this plant sparingly especially if other shrubs, forbs and grasses are available. Its large volume of long, curving leaves provides good cover for small game.

### ESTABLISHMENT

It is best to broadcast weeping lovegrass seed on prepared seedbeds. Airplane broadcasting is often used. Due to very small seed, plant one-half inch deep or less. If the seed is drilled, plant on very firm, well prepared seedbeds. Plant one pound of seed per acre in irrigated pastures or two pounds per acre in range or dryland pasture seedings. Irrigated seedbeds are prepared as for other grasses and legumes. Common methods of range seedbed preparation are root-plowing, pitting, plowing, bulldozing and chaining. Irrigated plantings may be spring seeded when average daily temperatures reach 65 F. Dryland plantings may be seeded between March 1 and July 15.

### MANAGEMENT

New seedings should be fully protected from grazing for two growing seasons. Range or dryland pastures should be spring and winter grazed with no more than 60 percent of the current season's growth being utilized. Weeping lovegrass in irrigated pastures, used properly, must be grazed before the heading stage and reduced rapidly to a 5 or 6-inch stubble height. If old growth accumulates in dryland plantings, it may be necessary to burn or clip the stands in order to restore palatability.

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